## What is claimed is:

**[Claim 1]** 1. An apparatus for providing electrical signals to bicycle components, wherein the apparatus comprises:

a housing adapted to be mounted to the bicycle;
a regulator supported by the housing to receive signals from a power supply; and
an output disposed on the housing to supply regulated signals provided by the regulator to a plurality of electrical components external to the housing.

**[Claim 2]** 2. The apparatus according to claim 1 wherein the output comprises a plurality of power communication paths, wherein at least two of the plurality of power communication paths provide different power characteristics.

**[Claim 3]** 3. The apparatus according to claim 1 further comprising an input disposed on the housing to receive power from an external power supply and to supply the power from the external power supply to the regulator.

**[Claim 4]** 4. The apparatus according to claim 3 wherein the input is adapted to receive power from an alternating current generator.

**[Claim 5]** 5. The apparatus according to claim 4 further comprising a power storage element supported by the housing for storing power from the alternating current generator.

**[Claim 6]** 6. The apparatus according to claim 4 wherein the plurality of electrical components comprise a radio, a cell phone charger and a light.

**[Claim 7]** 7. The apparatus according to claim 1 wherein the output comprises an external terminal structured to be detachably connected to at least one of the plurality of electrical components.

**[Claim 8]** 8. The apparatus according to claim 7 further comprising a mounting member disposed on the housing to detachably mount the at least one of the plurality of electrical components to the housing.

**[Claim 9]** 9. The apparatus according to claim 8 wherein the external terminal comprises a contact terminal structured to contact a

complementary contact terminal on the at least one of the plurality of electrical components when the at least one of the plurality of electrical components is mounted to the housing.

**[Claim 10]** 10. The apparatus according to claim 8 wherein the mounting member comprises one of a convex portion and a concave portion structured to engage a corresponding one of a concave portion and a convex portion on the at least one of the plurality of electrical components.

**[Claim 11]** 11. The apparatus according to claim 8 further comprising a plurality of the external terminals, each external terminal being structured to be detachably connected to a corresponding one of the plurality of electrical components.

**[Claim 12]** 12. The apparatus according to claim 11 wherein at least two of the plurality of external terminals provide different power characteristics.

**[Claim 13]** 13. The apparatus according to claim 7 further comprising a plurality of mounting members disposed on the housing, each mounting member being structured to detachably mount a corresponding one of the plurality of electrical components to the housing.

**[Claim 14]** 14. The apparatus according to claim 13 further comprising a plurality of the external terminals, wherein the plurality of external terminals comprise a plurality of contact terminals, and wherein at least one of the plurality of contact terminals is provided for each of the plurality of mounting members and is structured to contact a complementary contact terminal on at least one of the plurality of electrical components when the at least one of the plurality of electrical components is mounted to the corresponding mounting member.

**[Claim 15]** 15. The apparatus according to claim 13 further comprising a plurality of the external terminals, wherein the plurality of external terminals comprise a plurality of connector terminals, and wherein at least one of the plurality of connector terminals is provided for each of the plurality of mounting members and is structured to engage a complementary connector terminal on at least one of the plurality of

electrical components when the at least one of the plurality of electrical components is mounted to the corresponding mounting member.

**[Claim 16]** 16. The apparatus according to claim 15 wherein the at least one of the plurality of connector terminals comprises one of a male and a female connector terminal, and wherein the complementary connector terminal comprises the other one of the male and the female connector terminal.

**[Claim 17]** 17. The apparatus according to claim 13 wherein each of the plurality of mounting members comprises one of a convex portion and a concave portion structured to engage a corresponding one of a concave portion and a convex portion on at least one of the plurality of electrical components.

**[Claim 18]** 18. The apparatus according to claim 13 wherein at least two of the plurality of external terminals, each associated with different mounting members, provide different power characteristics.

**[Claim 19]** 19. The apparatus according to claim 1 wherein signals communicated from the regulator to the output is adapted to be communicated to a display.

**[Claim 20]** 20. The apparatus according to claim 19 further comprising a data signal output disposed on the housing and structured to communicate a data signal to the display.

**[Claim 21]** 21. The apparatus according to claim 20 further comprising a signal input disposed on the housing and structured to receive a signal from outside of the housing.

**[Claim 22]** 22. The apparatus according to claim 21 further comprising a waveform shaping circuit supported by the housing, wherein the waveform shaping circuit receives the signal from the signal input and provides a shaped signal as the data signal to the data signal output.

**[Claim 23]** 23. The apparatus according to claim 22 wherein the signal input is structured to receive a signal from an alternating current generator.

**[Claim 24]** 24. The apparatus according to claim 23 wherein the regulator receives the signal from the alternating current generator and

uses the signal from the alternating current generator to provide power to the output that is adapted to power the display.

**[Claim 25]** 25. The apparatus according to claim 24 further comprising a power storage element supported by the housing for storing power from the alternating current generator.

**[Claim 26]** 26. An apparatus for providing electrical signals to bicycle components, wherein the apparatus comprises:

a housing adapted to be mounted to the bicycle;
a voltage regulator supported by the housing to receive power from a power supply and to provide a plurality of different voltages adapted to power a plurality of electrical components; and
an output disposed on the housing to supply the plurality of different voltages from the regulator to the plurality of electrical components external to the housing.

**[Claim 27]** 27. An apparatus for providing electrical signals to bicycle components, wherein the apparatus comprises:

a housing adapted to be mounted to the bicycle;
a regulator supported by the housing to receive signals from a signal source;
a plurality of mounting members disposed on the housing to directly attach a corresponding plurality of electrical components to the housing; and
an output disposed on the housing to supply regulated signals provided by the regulator to the plurality of electrical components mounted to the plurality of mounting members.

**[Claim 28]** 28. An apparatus for providing electrical signals to bicycle components, wherein the apparatus comprises:

a housing adapted to be mounted to the bicycle;
a regulator supported by the housing to receive signals from a signal source;
a mounting member adapted to directly mount one of a plurality of electrical components to the housing, each electrical component having different signal requirements; and

an output disposed on the housing to supply regulated signals provided by the regulator to each of the plurality of electrical components when individually mounted to the mounting member.